

WHAT IS CLAIMED IS:

- 1 1. In a casing for endoscopic manipulating head assembly, said
- 2 casing being formed of a synthetic resin material and largely
- 3 constituted by a main cover section and a grip cover section, said main
- 4 cover section being adapted to support thereon an operating member
- 5 of an angulation control mechanism, and said grip cover section being
- 6 projected forward from said main cover section to provide a grip portion
- 7 between said main cover section and an insertion tube of said
- 8 endoscope:
 - 9 a rigid support plate provided mostly within said main section
 - 10 and partly in said grip cover section to support said angulation control
 - 11 mechanism;
 - 12 a plural number of passage-forming tubular structural members
 - 13 successively connected one after another within said grip cover section
 - 14 for passing internal components to or from said insertion tube of said
 - 15 endoscope, a tubular member at the proximal end of said grip cover
 - 16 section being connected to said rigid support plate;
 - 17 a first anti-twist lock portion for blocking rotational movements
 - 18 of said grip cover section relative to said main cover section, formed by

19 said support plate between said main cover section and a proximal end
20 of said grip cover section connected to said main cover section; and
21 a second anti-twist lock portion formed between a joint portion of
22 said tubular members and said grip cover section of said casing.

1 2. A casing for endoscopic manipulating head assembly as
2 defined in claim 1, wherein a passage is formed in and through said
3 grip cover section by successively connecting three tubular structural
4 members, including a first tubular member being connected to said
5 support plate at a proximal end thereof and connected a second
6 tubular member at a fore end thereof through a reinforcing ring, and
7 said second tubular member having a fore end portion thereof inserted
8 in a proximal end portion of a third tubular member.

1 3. A casing for endoscopic manipulating head assembly as
2 defined in claim 2, wherein said first to third tubular members as well
3 as said support plate is formed of a light metal, and said reinforcing
4 ring between said first and second tubular members is of stainless
5 steel.

1 4. A casing for endoscopic manipulating head assembly as
2 defined in claim 3, wherein said first to third tubular members as well
3 as said support plate is formed of aluminum or an aluminum alloy.

1 5. A casing for endoscopic manipulating head assembly as
2 defined in claim 1, wherein said first anti-twist lock portion is formed
3 by placing opposite side edge portions of said support plate in a pair of
4 axial grooves provided on inner surfaces of said main and grip cover
5 sections of the casing.

1 6. A casing for endoscopic manipulating head assembly as
2 defined in claim 1, wherein said second anti-twist lock portion is
3 formed by an axial groove provided on a large diameter portion at a
4 fitting joint portion of said tubular structural member, and an axial
5 protuberance or rib provided on an inner surface of said grip cover
6 section for tight fitting engagement with said axial groove.